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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/275,934	03/24/1999	MARK WILLIAM JANOSKA	1400.4100209	1410

25697 7590 07/29/2004

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EXAMINER	
HOANG, THAI D	

ART UNIT	PAPER NUMBER
2667	18

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/275,934	JANOSKA ET AL.	
	Examiner	Art Unit	
	Thai D Hoang	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed on 05/14/2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *24-27* is/are allowed.

6)☒ Claim(s) *1-5,7-8,11-21* is/are rejected.

7)☒ Claim(s) *6,9,10,22 and 23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5, 7-8, 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto, U.S patent No. 6,075,767.

Regarding claims 1 and 15, Sakamoto discloses a system having a redundant architecture for switchover to a line interface. Sakamoto discloses that the system comprises a switch core (2), wherein the switch core has a plurality of inputs and a plurality of outputs, wherein the switch core passes data received on the plurality of inputs to the plurality of outputs based on routing tags (col. 1, lines 13-17; col. 2, lines 19-22; col. 9, lines 8-11; col.13, lines 4-6); and a plurality of line card managers (3) operably coupled to the switch core (2) and adapted to couple to a plurality of line card pairs (1-1 and 1-2), wherein each line card manager includes an arbiter (MPU 28) that couples to a first line card and a second line card of a line card pair, wherein each line card manager couples to a different line card pair, wherein each arbiter is operably coupled to a corresponding input of the plurality of inputs of the switch core, wherein the arbiter provides ingress data from one of the first and second line cards to the corresponding input to the switch core based on selection information (figures 1 and 17;

col. 7, line 40 - col. 8, line 67.) Sakamoto does not explicitly disclose that the line card manager (3) includes a router. However, Sakamoto discloses that the first and second line cards (1-1 and 1-2) comprise a routing function (col. 2, lines 20-22; col. 9, lines 8-11; col. 12, lines 50-55; col.13, lines 4-6), which provides egress data from the corresponding output to the first and second line cards based on routing information included in the egress data (fig. 3, col. 2, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the routing function in the first and second line cards disclosed by Sakamoto into the line card manager in order to simplify the structure and reduce the cost of the system.

Regarding claims 2, 3, 16 and 19, Sakamoto does not disclose that each line card manager further comprises buffering circuitry operably coupled to the arbiter, wherein the buffering circuitry buffers ingress data from the first and second line cards, wherein the arbiter provides ingress data from the buffering circuitry to the switch core based on the selection information. However, buffers are used in most of telecommunications systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a buffer into the system disclosed by Sakamoto in order to control data flow in the system.

Regarding claims 4 and 17, Sakamoto discloses that the selection information determines an active line card and an inactive line card of the line card pair, wherein the arbiter preferentially passes active line card data over inactive line card data (col. 8, lines 9-67.)

Regarding claims 5 and 21, Sakamoto discloses that the redundant line card becomes active line card when a defect or failure is detected in the first line card (col. 1, lines 48-52; col. 2, lines 27-33; col. 7, line 62 – col. 8, line 8) inactive line card data is selected when idle data in active line card is detected.

Regarding claims 7 and 20, the system disclosed by Sakamoto comprises selector (9) operably coupled to the arbiter (MPU 28), wherein the selector (9) pass selected data types and reject other data types in order to select useful signals (col. 8, lines 28-33, and 53-59.)

Regarding claim 8, Sakamoto discloses that the register (27) that determines the selected data types.

Regarding claim 11, the system disclosed by Sakamoto comprises a NxN switch core and the plurality of line cards includes 2N line cards (figures 1-4 and 17.)

Regarding claims 12-14, Sakamoto discloses that the system comprises an ATM switch; therefore, it is used in a cell based network.

Regarding claim 18, Sakamoto discloses a system having a redundant architecture for switchover to a line interface (figure 1). Sakamoto discloses that the system comprises the steps of selecting ingress data from data received from a first line card and a second line card, wherein selecting is based on an active select signal, wherein the active select signal determines an active line card and an inactive line card from the first and second line cards; providing the ingress data to an input of a switch core, wherein the switch core includes a plurality of inputs and a plurality of outputs; receiving egress data from one of the plurality of outputs of the switch core; and

selectively providing the output data to at least one of the first and second line cards based on routing information included in the egress data (figures 1,12 and 17; col. 7, line 40 - col. 8, line 67.) Sakamoto does not explicitly disclose that the line card manager (3) includes a router. However, Sakamoto discloses that the first and second line cards (1-1 and 1-2) comprise a routing function (col. 2, lines 20-22; col. 9, lines 8-11; col. 12, lines 50-55; col.13, lines 4-6), which provides egress data from the corresponding output to the first and second line cards based on routing information included in the egress data (fig. 3, col. 2, lines 23-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the routing function in the first and second line cards disclosed by Sakamoto into the line card manager in order to simplify the structure and reduce the cost of the system.

Allowable Subject Matter

Claims 6, 9-10 and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 24-27 are allowed for reasons given in the previous action.

Response to Arguments

Applicant's arguments filed 05/14/2004 have been fully considered but they are not persuasive.

Regarding claim 1, page 2, lines 5-7 Applicants argue that the reference does not suggest modifying the system. Examiner respectfully disagrees. Applicants are directed to col. 15, lines 2-4, the reference discloses "It to be appreciated that those skilled in the

art can change or modify the embodiments without departing from the scope and spirit of the present invention." Therefore, one of ordinary skill in the art would be able to modify the routing function disclosed by Sakamoto's system becomes a router unit for advantages cited above with respect to claim 1.

Similarly, the arguments of claims 15 (p. 2, lines 3-12), 18 (p. 4, lines 1-10) and 2, 3, 16 and 19 (p. 2, lines 13-24) have been fully considered but they are not persuasive for the same reason explained above.

Regarding claims 4 and 17, in the remarks page 2, line 25 - page 3, line 2, Applicants argue that the limitations recited in claims 4 and 17 could not found in the portion cited by the Examiner. Examiner respectfully disagrees. Col.8, lines 9-67 and figure 1, the reference clearly teaches that the register 27 of the selector card 3 selects data from either active line card or standby line card (inactive) of the line card pair 15.

Regarding claims 5 and 21, in the remarks page 3, line 3-7, Applicants argue that "failure" and "defect" states in the portions cited by the Examiner are not relevant with the subject matter recited in the claims. Examiner respectfully disagrees. The "failure" and "defect" states in the reference are considered as "idle states" recited in the claims 5 and 21.

Regarding claims 7-8 and 20, page 3, lines 8-19 of the remarks Applicants argue that the reference does not include filters as recited in the claims. Examiner respectfully disagrees. The selector 9 in the reference selects data from either active line card or standby line card (inactive) of the line card pair 15. Therefore, it performs as a filter as recited in the claims.

The rejection of the claim 9 is withdrawn. It is objected and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as shown above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (703) 305-3232. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (703) 305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang

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SUPERVISORY PATENT EXAMINER
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